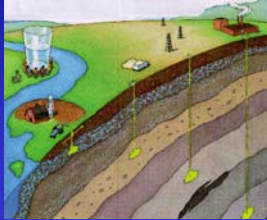


CO2 Sequestration and the Underground Injection Control (UIC) Program



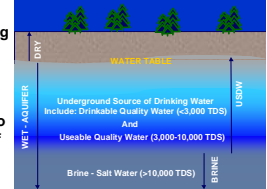
A Federal Perspective For the Third Carbon Sequestration Conference USEPA- OGWDW

May 6, 2004
Alexandria, VA



SDWA UIC Program Refresher

- ◆ SDWA (1974) requires that EPA determine the need for and to promulgate regulations sufficient to protect underground sources of drinking water (USDWs).
- ◆ Establishes a process for delegating primary enforcement authority to States and Tribes.
- ◆ Authorizes EPA to provide grants to the States (and tribes) in support of essential program functions.
- ◆ Provides States with flexibility to establish effective Class II (oil and gas) programs [since 1981].

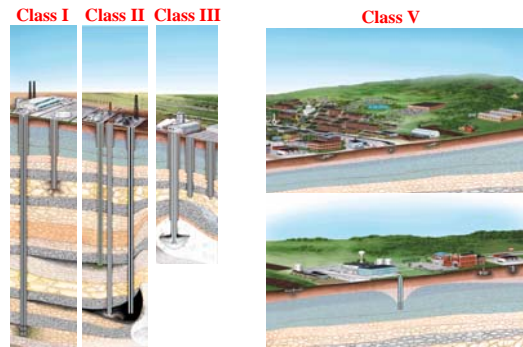


UIC Roles and Responsibilities

- ◆ **Federal Roles:** Set national standards & program requirements; provide State assistance; support & advance sound science; approve & oversee State delegations; 17 direct implementation programs in states.
- ◆ **States and Tribes:** Submit applications & assume program primacy authority for all or part of the UIC Program; 33 States have primacy. [Requirements must meet or exceed Federal standards; states & tribes must demonstrate adequate enforcement capability.]
- ◆ **Operators:** Manage wells in compliance with all requirements.
- ◆ **Public & Interest Groups:** Involvement.
- ◆ **GWPC (& other Associations):** Facilitate communication; training & assistance.



UIC Program: Major Components



UIC Priorities

- ◆ **HYDRAULIC FRACTURING/COAL BED METHANE**
- ◆ **CLASS I MUNICIPAL WELLS IN FLORIDA**
- ◆ **ESTABLISHING UIC MEASURES OF SUCCESS**
- ◆ **CLASS V WELL STRATEGY**
- ◆ **UIC WELL SPECIFIC DATABASE**
- ◆ **UIC STATE AND TRIBAL PRIMACY PROGRAM REVISIONS AND NEW APPLICATIONS**



More UIC Priorities

- ◆ **TECHNICAL ASSISTANCE TO REGIONS AND STATES**
- ◆ **DESALINATION AND DRINKING WATER TREATMENT RESIDUALS**
- ◆ **AQUIFER STORAGE AND RECOVERY WELLS**
- ◆ **CARBON SEQUESTRATION**



CO2 Related Activities in 2003

- ◆ 2nd Annual Carbon Sequestration Conference
- ◆ EPA Participation in GEO S&Q
- ◆ EPA/State UIC Technical Workgroup
- ◆ UIC Manager's Meeting- Denver, June 2003
- ◆ 2nd International Underground Injection Science and Technology Conference
 - October 2003 at Lawrence Berkeley Lab
 - Over 140 participants from 30 countries
 - Half Day of CO2 injection related presentations



Coordination Starts with EPA Offices

- ◆ Early 2004 Communications with Office of Air
- ◆ Participation in EPA Geologic Carbon Sequestration Workshop – February 2004
- ◆ Briefings begin with OGWDW/UIC Management in March 2004
- ◆ Meetings between OAR and Office of Water Deputy Assistant Administrators – April 2004
- ◆ Joint OAR/OW Briefing with the Deputy Administrator – April 2004
- ◆ Participation at DOE 3rd Annual Conference on Carbon Capture & Sequestration – May 2004



Latest Discussions

- ◆ Ground Water Protection Research Foundation
 - Annual Policy Meeting in March 2004
 - Decision to Prepare Research Paper on CO2 Issues
 - EPA/State/Federal Labs/Industry Collaboration
- UIC Manager's Meeting for 2004
 - New York City – May 17th
- Continued Collaboration between OAR and OW and Talks with EPA Senior Management



Future Plans

- ◆ EPA will continue to work with all stakeholders
- ◆ OGWDW will work with Regions and States on UIC permitting issues on an “as needed” basis
- ◆ Further “position development” may come as an outgrowth of work via:
 - Office of Air and Radiation/Climate Programs
 - Ground Water Protection Council
 - EPA/State UIC Technical Workgroup



Why?...Public Health Concerns

- ◆ Nature of certain injected fluids pose a risk to ground water quality and public health if managed improperly.
- ◆ Even deep Class I and Class II wells must be properly sited and constructed to avoid contaminating USDWs.

Class V Wells:
Are numerous & may be in close proximity to PWS or private wells;

They Inject a wide range of fluids;

Inventory, location & injectate data is incomplete.

